



# Smart packaging - with reduced energy

**Canadian designer and manufacturer of value-added machinery thinks outside the box. "Through our machinery, we add value," explains Derek Dlugosh-Ostap, president of Pack-Smart Inc. "As a solution provider it is our duty to help our customers realize their true business potential."**

According to Dlugosh-Ostap, his company essentially performs in five sectors: 25 per cent of its business involves rigid-window systems; 25 per cent involves the secure gift card business, which includes credit cards and scratch lotteries; 20 per cent is dedicated to media packaging including, but not limited to DVD's and CDs; 10 per cent involves adding samples or coupons to packages, while the remainder involves digital printing or combinations of the previously listed sectors. "We create machinery specific to your needs to maximize the amount of added-value for one's client," notes Dlugosh-Ostap.

"It became obvious by 2002 that the facility was no longer large enough for us, but because business was so good, we really didn't have the time to move into a larger facility until 2005 when we either had to move and grow or begin to stagnate," states Dlugosh-Ostap adding that this 24,000 square-foot state-of-the-art plant now has 27 employees with room to grow.

The family-owned business currently creates 50 per cent of its solutions for U.S.-based companies, with another 20 per cent heading for Europe, 15 per cent for Canada, with the remaining 10 per cent for the rest of the world.

Dlugosh-Ostap says his company serves companies involved in the hi-end packaging products-high-visibility packaging for business sectors dealing with liquor, perfumes, consumer goods, cereals and soft drinks, dealing with such major customers as: Technicolor Home Entertainment who package CDs and DVDs, The Specialized Packaging Group, Inc., Arlington Press and the Metaca Corporation.

Having performed work for customers involved in sectors like: direct mail, security, printing and finishing, and pharmaceutical, it's obvious Pack-Smart is unafraid to look everywhere to determine where value can be added-even the provincial government.

"Recently, we got involved with the Ontario government's Advanced Manufacturing Investment Strategy (A.M.I.S.)-a provincial program that will help us develop a new line of unique packaging technology," notes Dlugosh-Ostap, telling how the Province is helping pioneering companies grow and create jobs. "We will receive \$790,000-10 per cent of the \$7.9 million expansion project-that we will have to pay back."

Along with growth, Pack-Smart supports the next generation of equipment that will improve packaging's appearance while keeping sustainability at the forefront.

Says Minister of Economic Development and Trade; Sandra Pupatello during a recent visit to Pack-Smart to acknowledge the loan: "Here's a company with innovative people and products. That's a winning combination that puts Ontario ahead in world markets and creates good jobs at home. Our government wants to do everything it can to help companies like this succeed." Realizing that success is co-dependent on the customer as well, Pack-Smart's own history proves that it can deliver fantastic results when its client's share the "think outside the box" philosophy. "We really don't just want to be a solution provider for our





Powerful packaging machines for demanding high-end applications. The range of products that are manufactured using PackSmart machines is extremely varied.

customers," says Dlugosh-Ostap, "We also want to be their business partner."

Dlugosh-Ostap says Pack-Smart has developed innovative electronically geared machinery that is flexible and modular enough to handle a full gamut of packaging and assembly tasks. "The machines that we will continue to design will enable our company's customers to shorten processing times while also using more ecologically-friendly plastics and adhesives, which will enable them to save on raw materials all the while we improve the packaging's appearance." Dlugosh-Ostap says that while an effective packaging device-in its day-he is not a big fan of clamshell packaging and prefers utilizing rigid and flexible window technology in his packaging machinery instead.

"Whenever possible, we try and talk to our clients about utilizing PLA-a corn-based resin-instead of true petroleum-based materials," mentions Dlugosh-Ostap. "Used in conjunction with our technology, we can effectively reduce the cost of packaging by 50 per cent, as opposed to clamshell packaging."

At the heart of Pack-Smarts pick and place technology is its RP Series, based on its rotary pick and place feeding system that was first devised a

decade ago by Dlugosh-Ostap as a means to tip and insert three-dimensional products such as CDs, cosmetic samples, pharmaceutical samples and edible product samples.

Innovative packaging technologies allow a considerable reduction of power consumption.

Part of the allure of the RP Series of equipment is that it is modular-its carriers can be randomly spaced anywhere on the conveyance system because the servo system always moves the placement item so that it is placed precisely into the carrier. A current design offshoot shows the system capable of handling speeds of up to 800 pieces per minute. Powering the RP Feeder to such high speeds is accomplished through the integration of B&R servo motors, which not only provide the system with industry leading speeds but also provide the customer with a sustainable advantage.

Energy savings is a marquee point of the RP placer, were the B&R motors help reduce power consumption of the machine by approximately a factor of 2. And with the "Integrated power regeneration unit", the machine is able to convert kinetic (heat) energy during breaking back into the power supply as electricity, further reducing the power consumption of the machine. The rotary placer is also portable with wheels so that it can be moved from line to line, adjusted up or down or back and forth. "It's very modular and can be utilized in any production line easily fitting in with most webs, folder gluers and converting lines," reveals Dlugosh-Ostap.

"We use B&R for our controls and motors," explains Dlugosh-Ostap noting that it also uses B&R touch screens for its PLC's (programmable logic controllers). "The products which B&R produces are compact and modular and is of the highest quality-which fits perfectly with our own philosophy."

"Basically it means that our clients can grow with our equipment-build bigger, faster and more sophisticated systems only as your needs dictate-and we ensure the parts we utilize in our machinery can do that."

The ACOPOS servo drives offer increased production quantities, reduced production cycles and improved quality with greater precision while offering connection possibilities for all standard encoder systems and modular fieldbus interfaces.

Dlugosh-Ostap says his company had looked for quite some while for the right partner-discovering much to his chagrin that it wasn't easy to join other company systems with his newly designed products.

"Our systems are sold globally and as such, we want to be able to access them over the Internet and if necessary, trouble-shoot our products by way of an IP address," offers Dlugosh-Ostap noting that the real-time Ethernet protocol ETHERNET Powerlink along with its modular and scalability were key to B&R becoming a preferred Pack-Smart supplier. "We found that we were able to achieve our goals by using products manufactured by B&R."

"We have always strived to look beyond the limitations of today's technologies," summarizes Dlugosh-Ostap. "Pack-Smart has always focused on raising the bar-but always with our customer and the environment in mind-it's our niche."

"We are always looking to set higher standards for the industry and increased the return on investment (ROI) for our clients. It's why over the past decade the company has had such a steady upward growth, and why we will continue to grow - but not without the help of B&R Canada." ■

## PackSmart:



**Founded:** 1998

**Employees:** 40

**Locations:** Toronto (CN)

**Products & Services:** PackSmart develops machines for a multitude of companies from all branches of industry, where extraordinary packaging solutions are in demand.

[www.packsmartinc.com](http://www.packsmartinc.com)